

Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application. No amendments (after the Examiner's amendment of September 18, 2008) have been made, and is merely presented here for completeness of this response:

1. (previously presented) A method for supporting multiple diagnostic sessions in a bi-directional communication device, said method comprising:
 - receiving diagnostic session requests from a plurality of requesters;
 - verifying identification information for each of said requesters;
 - establishing a communications channel for each verified requester; and
 - communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications channels,wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and
wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.
2. (previously presented) The method of claim 1, further comprising:
 - if communication of information to a requester fails, making available, to a subsequent requester, the communications channel associated with the failed communication.
3. (original) The method of claim 1, wherein said identification information comprises a user ID and a password.

4. (original) The method of claim 1, wherein said establishing a communications channel comprises assigning an available socket for communication with each verified requester.

5. (original) The method of claim 4, further comprising rejecting subsequent requests after a total number of available sockets has been assigned.

6. (canceled)

7. (canceled)

8. (previously presented) An apparatus for supporting multiple diagnostic sessions in a bi-directional communication device, said apparatus comprising:

a server;

a memory for storing program instructions; and

a processor for executing said instructions to configure the apparatus to perform the steps of:

receiving diagnostic session requests from a plurality of requesters;

verifying identification information for each of said requesters;

establishing a communications channel for each verified requester; and

communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications channels,

wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

9. (previously presented) The apparatus of claim 8, further configured to perform the step of:

if communication of information to a requester fails, making available, to a subsequent requester, the communications channel associated with the failed communication.

10. (previously presented) The apparatus of claim 8, further configured to perform the steps of:

rejecting subsequent requests after a total number of available sockets has been assigned.

11. (previously presented) The apparatus of claim 8, wherein said establishing a communications channel comprises assigning an available socket for communication with each verified requester.

12. (previously presented) The apparatus of claim 11, wherein said assigned sockets comprise a requester IP address and a requester receiving port number.

13. (previously presented) The apparatus of claim 8, wherein said plurality of requesters comprise Telnet clients.

14. (previously presented) The apparatus of claim 8, wherein said plurality of requesters are network devices.

15. (previously presented) The apparatus of claim 8, wherein said server comprises:
a web server for enabling communication between a requesting device and a diagnostic engine; and
said diagnostic engine for performing the routines that are specified in each of said requests.

16. (previously presented) The apparatus of claim 8, wherein said apparatus comprises a modem.

17. (previously presented) An apparatus for supporting multiple Telnet sessions, comprising:
means for receiving Telnet session requests from a plurality of requesters;
means for verifying identification information for each of said requesters;
means for establishing a communications channel for each verified requester; and
means for communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications channels,
wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

18. (previously presented) Computer-readable medium for storing a set of instructions, wherein when said set of instructions is executed by a processor perform a method comprising:

receiving Telnet session requests from a plurality of requesters;
verifying identification information for each of said requesters;
establishing a communications channel for each verified requester; and
communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications channels,

wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

19. (previously presented) A network comprising:
at least one subscriber terminal comprising a Telnet client for initiating Telnet session requests;
at least one data servicing system comprising a Telnet client for initiating Telnet session requests; and
a network device comprising:

a Telnet server;

a memory for storing program instructions; and

a processor for executing said instructions to configure said network device to perform the steps of:

receiving Telnet session requests from said at least one subscriber terminal and said at least one data servicing system;

verifying identification information for each of said requesters;

establishing a communications channel for each verified requester; and

communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications channels,

wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

20. (previously presented) The network of claim 19, wherein said network device is further configured to perform the step of:

if communication of information to a requester fails, making available, to a subsequent requester, the communications channel associated with the failed communication.